Please replace the paragraph beginning on page 2, line 12, with the following rewritten paragraph:

--Fig. 2(a) shows an encoder used in the trellis coded modulation method that uses Turbo codes as element codes. Fig. 2(b) is an encoder used in 16QAM (quadrature amplitude modulation). Fig. 2(c) shows a construction of a tone in a multi-carrier modulation and demodulation method. Referring to Figs. 2(a)-2(c), a Turbo encoder 1 receives an input of two information bits and outputs two information bits and 2 redundancy bits. A conversion 2 subjects a bit sequence output from the Turbo encoder to conversion. A mapper 3 converts the bit sequence converted by the conversion 2 into the signal points.--

Please replace the paragraph beginning on page 2, line 20, with the following rewritten paragraph:

--Fig. 3 shows a construction of the Turbo encoder 1 of Figs. 2(a)-2(c). Referring to Fig. 3, the Turbo encoder 1 includes a recursive systematic convolutional encoder 11, interleavers 12 and 13, a recursive systematic convolutional encoder 14 and a deinterleaver 15.--

Please replace the paragraph beginning on page 4, line 5, with the following rewritten paragraph:

--Figs 4(a)-4(c) shows constellations of signal points that occur in various digital modulation techniques. Fig. 4(a) shows a

constellation of signal points in 4PSK (phase shift keying), Fig. 4(b) shows a constellation of signal points in 16QAM, and Fig. 4(c) shows a constellation of signal points in 64QAM. Referring to Fig. 4, symbols A, B, C and D denote cosets, which are determined after the conversion.--

Please replace the paragraph beginning on page 4, line 11, with the following rewritten paragraph:

--Figs. 4(a)-4(c) shows constellations of signal points that occur in various digital modulation techniques. Fig. 4(a) shows a constellation of signal points in 4PSK (phase shift keying), Fig. 4(b) shows a constellation of signal points in 16QAM, and Fig. 4(c) shows a constellation of signal points in 64QAM. Referring to 4(a)-4(c), symbols A, B, C and D denote cosets, which are determined after the conversion.--

Please replace the paragraph beginning on page 4, line 25, with the following rewritten paragraph:

--When the coset is determined, the mapper 3 receives the coset and the high-order information bit so as to determine the transmitted signal point W or the transmitted signal point V based on the constellation of 4(a)-4(c).--

Please replace the paragraphs beginning on page 13, lines 3-17, with the following rewritten paragraph:

--method;

Fig. 3 shows a construction of the Turbo encoder of Figs. 2(a)-2(c);

Fig. 4(a) shows a constellation of signal points in 4PSK;

Fig. 4(b) shows a constellation of signal points in 16QAM;

Fig. 4(c) shows a constellation of signal points in 64QAM;

Fig. 4(d) shows a table referred to in order to determine cosets;

Fig 4 (e) shows a table for use in 16QAM of Fig. 4B to determine one of areas E, F, G and H of the transmitted signal point responsive to the transmitted high-order information bit w_3, w_2 (or v_3, v_2);

Fig. 5 is a flowchart showing a demodulating method according to a first embodiment of the present invention;

Fig. 6 is a graph showing the probability of decoding error when the decoding according to the invention is performed;

Fig. 7 shows a demodulating apparatus according to a second embodiment of the present invention; and

Fig. 8 (a) shows a comparison between the related art and the present invention about the areas for determination of high-order information bit;

Fig. 8 (b) shows a square Euclidean distance form a nearest signal point;

Fig 8 (c) shows an Euclidean distance from a threshold value; and

Fig 8 (d) shows tables referred to in order to determine cosets.--